

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re patent application of

Deok-kee Kim et al.

Conf. No.: 4565

Serial No.: 10/710,566

Group Art Unit: 2811

Filed: July 21, 2004

Examiner: A. Arena

For: TOP-OXIDE-EARLY PROCESS AND ARRAY TOP OXIDE
PLANARIZATION

Commissioner for Patents
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APPELLANT'S REPLY BRIEF UNDER 37 C.F.R. §41.41

This Reply Brief is in response to the Examiner's Answer mailed March 10, 2008. While no new grounds of rejection are raised in the Examiner's Answer, this Reply Brief responds to the Examiner's observations and assertions in regard to Appellant's Brief filed November 19, 2007, and points of argument raised in the Examiner's Answer.

In section V of the Examiner's Answer, the Examiner asserts that the summary of claimed subject matter contained in the Brief is incorrect. In this regard, it is respectfully pointed out that the Examiner questions only two sentences thereof.

The Examiner first asserts that the three exemplary embodiments of the invention are not summarized in paragraph 0026. It is respectfully pointed out that, while paragraph 0026 serves as an introduction to the first embodiment, it also contains a summary of the basic features of the invention which are common to the

three embodiments (e.g. deglazing, reduction of step and/or average height, use of a hard mask instead of a liner, etc.) which are carried out in different ways in each of the respective embodiments. Therefore, it is not clear that the reference to paragraph 0026 is in error. However, upon review, it appears that reference to paragraph 0026 could be a typographical error or an omission since a possibly more informative summary of the three exemplary embodiments of the invention appears in paragraph 0015 of the specification as originally filed and reference thereto is also hereby made. It is also respectfully pointed out that reference to *both* paragraphs 0015 and 0026 *together* is correctly made in the tabular summary of disclosure of the claimed subject matter of claim 1. Thus it is seen that the summary of the claimed subject matter is not incorrect in this regard.

In regard to the other sentence questioned by the Examiner, the Examiner's noting of a typographical error is appreciated. The end of the questioned sentence should have read "...claimed *dependent* claim 14 and dependent *claim* 15."

In response to arguments made in the Brief (Section X of the Examiner's Answer, beginning on page 9 thereof), the Examiner asserts that all recitations of all claims have been fully considered and accorded all weight *to which they are entitled*. The Examiner then addresses the recitations argued in regard to particular claims and accords no weight to explicit recitations which distinguish from Hummler to justify the Examiner's assertion that "Hummler contains teachings which answer all claim recitations; there is no admission to the contrary." citing M.P.E.P. §2111.04 as authority therefor. It is believed that the Examiner's error in this regard is central to the issues presented in this Appeal. It is respectfully submitted that an explicit *assertion* by the Examiner that a claim recitation has been given no weight is an *admission*, as well, and "effectively ignores" such recitation(s) when patentable weight is improperly not accorded to the recitation(s) as is respectfully submitted to clearly be the case here.

Initially, it is respectfully pointed out that M.P.E.P. §2111.04 is directed to the weight that should be given to language in summation phrases such as “adapted to”, “adapted for”, “whereby” or “wherein” clauses, none of which are involved in the claim recitations to which the Examiner has explicitly accorded no weight; the word “whereby” appearing only in claim 14. That section of the M.P.E.P. clearly states (emphasis added) that the “determination of whether each of *these clauses* is a limitation in a claim depends on the specific facts of the case” citing *Hoffer v. Microsoft Corp., Inc.*, 74 USPQ2d 1481 (Fed. Cir., 2005) in which it was held (emphasis added) that when a “whereby” clause “states a condition that is material to patentability, it cannot be ignored *in order to change the substance of the invention*”. It is respectfully submitted that the same standard should be applied to any recitation whether in a summation clause or not; clearly indicating the impropriety of according no weight to the recitations at issue which clearly further define particular associated steps (e.g. by defining how the step is carried out and/or when the step can be considered complete) *and* serve to patentably distinguish from Hummler while the substance of the invention is clearly changed by the failure of the Examiner to accord weight to the recitation(s) such that the Examiner could arguably apply Hummler against the claims. Thus, the position the Examiner has taken appears to be diametrically contrary to the precedent cited in the section of the M.P.E.P. relied on by the Examiner as authority for taking that position. Further, by failing to logically justify the position that such recitations should be given no weight, particularly under the applicable precedent, the Examiner has, in fact, failed to properly consider the recitations, *per se*, to determine their import and significance in the respective claims.

M.P.E.P. §2111.04 also indicates that the *Hoffer* decision notes, citing *Minton v. National Ass’n of Securities Dealers*, 67 USPQ2d 1614 (fed. Cir., 2003), that a whereby clause (not involved with the recitations at issue, as noted above) is not given weight when it simply expresses the intended result of a process step positively

recited. It is respectfully submitted that such precedent is inapposite since the whereby clause merely included the term “efficiently” which was considered merely “laudatory” and not addressing the mechanics of how the associated steps are performed or serving to limit the claim or any step thereof in any other way, much less affecting patentability. Therefore, M.P.E.P. §2111.04 does not support the Examiner’s position but, on the contrary, clearly demonstrates the impropriety thereof in failing to accord patentable weight to *any* recitation that would serve to define a distinction from Hummler. Thus, the Examiner’s position and construction of the claims is clearly in error and improper; demonstrating the grounds of rejection at issue to be similarly clearly in error and improper.

Moreover, in many instances, the Examiner also ignores salient language in Appellant’s Brief in responding thereto. For example, in regard to claim 8 in the paragraph bridging pages 10 and 11 of the Examiner’s answer, the Examiner asserts that the term “structures” is so broad as to justify picking *particular* structure that would have approximately the same height as distinct from the clear import of the claim recitation in regard to equalizing heights of structures between areas. Similarly, in regard to the etch being non-selective and lack of enabling disclosure in Hummler of how to maintain sufficient non-selectivity obtain *the function of the invention in regard to maintaining planarity during the etch*, the Examiner merely asserts the presumed sufficient enabling disclosure of Hummler to support the *function of Hummler* which is not disclosed to be non-selective or to maintain planarity. Accordingly, it is respectfully submitted that, in many cases, the Examiner’s responses to arguments made in Appellants’ Brief do not, in fact, do so in much the same manner as the claimed subject matter has not been properly considered and do not establish the propriety of the grounds of rejection of record.

Beginning on page 10 of the Examiner’s Answer, under an apparently similar rationale, the Examiner asserts that arguing some recited features of the invention is

“misleading since other features of Hummler are relied upon ... as ‘reducing the claimed height of structures’ for rejection.” However, it is respectfully submitted that the *other features* relied upon by the Examiner only arguably correspond to the features claimed insofar as explicit recitations regarding them are given no weight, as argued on page 23, lines 1 - 15, which the Examiner thus criticizes. It is respectfully submitted that errors and omissions by the Examiner are the basic issue in this or, for that matter, any Appeal and that it cannot be “misleading” to argue language to which the Examiner has improperly accorded no patentable weight; a characterization which would deny the *possibility* of error in the Examiner’s position which is at issue and, as pointed out above, is diametrically contrary to the precedent cited in the M.P.E.P. upon which the Examiner improperly relies in maintaining that position.

In view of the foregoing, it is respectfully submitted that the errors and omissions in the final rejection from which this Appeal is taken are abundantly evident as set out in Appellant’s Brief and even more evident from the Examiner’s assertions in the Examiner’s Answer as pointed out above in this Reply Brief. The fact remains that the invention provides a number of features, some of which are, perhaps, subtle, which are distinct improvements over the methods disclosed in Hummler and avoid problems encountered with the methodologies which Hummler discloses and the basic issue in this Appeal is whether or not it is proper to accord no patentable weight to claim recitations which distinguish the improved features of the invention from those of Hummler. It appears from the very authority on which the Examiner relies that the Examiner’s position in this regard is clearly in error. Further, it is apparent that the Examiner has not properly considered the *possibility* of impropriety of not according patentable weight to explicit recitations of the claims and explicitly refers to arguments on that point as being “misleading” while echoing the Errors in consideration of the claims by failing to consider the entirety of language in arguments in Appellants’ Brief. Therefore, it is again respectfully submitted that

the rejections asserted and the positions taken by the Examiner are clearly in error and untenable and reversal of the Examiner is in order and respectfully requested.

Please charge any deficiencies in fees and credit any overpayment to Deposit Account No. 09-0458 of International Business Machines Corporation (East Fishkill).

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Marshall M. Curtis", with a stylized flourish at the end.

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